ABSTRACT

The present invention provides an industrial process for effectively and advantageously preparing optically active 1-substituted amino-2,3-epoxypropanes useful as intermediates for preparing agricultural chemicals and medical products from optically active 1-substituted amino-2,3-propanediols used as raw materials. The present invention also provides useful intermediates. Specifically, an optically active 1-substituted amino-2,3-propanediol (1) is reacted with an orthoacid ester (2) or thionyl chloride (3) to produce a cyclic optically active compound (4), and then a compound (5) containing a halogen atom is prepared by reaction with a ring-opening reaction agent having an ability to introduce a halogen atom X. Finally, an optical active 1-substituted amino-2,3-epoxypropane is prepared by ring-closure reaction in the presence of a base.